What is claimed is:

1. For use in a cathode ray tube display connected to a computer system, an apparatus for setting an ID code comprising:

video amplifier means for amplifying image information input from said computer system to display on a screen of said cathode ray tube display;

a key pad having an array of keys for generating a key input signal to compose an ID code;

memory means for storing ID code data input via said key pad by a user's manipulation;

a microcomputer for controlling said display responsive to a result of a comparison between said ID code input via said key pad with said ID code data stored in said memory, and for receiving horizontal and vertical frequency signals from said computer system to control an operation of said display;

an on-screen circuit for converting a digital information signal synchronized with a train of clock pulses input from said microcomputer into an analog video signal having red, green and blue components; and

mixer means for mixing said analog video signal input from said on-screen circuit and a signal input from said video amplifier means.

2. The apparatus for setting an ID code as set forth in claim 1, said apparatus further comprising a plurality of analog switches interposed on a respective electrical conduction path between respective output terminals of said computer system and respective input terminals of said video amplifier means, said analog switches being turned off by a control signal output from a video mute terminal of said microcomputer when the result of said comparison indicates that said ID code input from said key pad is inconsistent with said stored ID code data.

3. In cooperation with a computer system that provides analog computer image signals, a display system comprising:

a video amplifier to amplify the analog computer image signals to provide amplified image signals;

one of a first microcomputer circuit and a second microcomputer circuit, the first microcomputer circuit including a microcomputer coupled to the video amplifier to control the gain of the video amplifier, the second microcomputer circuit including the microcomputer coupled to analog switches that are coupled between the computer system and the video amplifier so that the microcomputer controls the connection state of the analog switches;

an on-screen circuit to convert digital information signals from the microcomputer into analog on-screen image signals, the microcomputer being coupled to horizontal and vertical synchronizing signals from the computer system to synchronize the analog on-screen image signals with the analog computer image signals;

a memory coupled to the microcomputer to store a stored ID code;

a key pad coupled to the microcomputer to form a keyed ID code, the microcomputer determining when the stored ID code is unequal to the keyed ID code, the microcomputer setting one of (1) the gain of the video amplifier to be substantially zero and (2) a connection state of the analog switches to be in a disconnected state when the microcomputer determines that the stored ID code is unequal to the keyed ID code; and

a mixer to provide CRT drive signals from a mix of the amplified image signals and the analog on-screen image signals.

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4. The system of claim **3**, wherein the microcomputer includes a first program module to receive and store a flag in the memory to indicate that a pass word system is one of enabled and disabled.

5. The system of claim **4**, wherein the microcomputer further includes a second program module to receive the keyed ID code and store the keyed ID code in the memory as the stored ID code when the flag indicates that the pass word system is enabled.

6. The system of claim **5**, wherein the microcomputer further includes:

a third program module to read the flag from the memory each time the display system is turned on to determine whether the pass word system is enabled;

a fourth program module to read data as an ID code from the memory at a location reserved for the stored ID code when the pass word system is enabled;

a fifth program module to determine consistency between the keyed ID code and the data read as an ID code from the memory;

a sixth program module to operate a normal routine of the display system when the keyed ID code and the data read as an ID code from the memory are consistent; and

an seventh program module to operate an error routine of the display system when the keyed ID code and the data read as an ID code from the memory are inconsistent.

7. The system of claim **4**, wherein the microcomputer further includes a second program module to receive the keyed ID code and store the keyed ID code in the memory as the stored ID code when both (1) the flag indicates that the pass word system is enabled and (2) data stored in the memory at a location reserved for the stored ID code has a predetermined value indicating that no ID code has been stored in the memory.

8. The system of claim **4**, wherein the microcomputer further includes a second program module to read the flag from the memory each time the display system is turned on to determine whether the pass word system is enabled.

9. The system of claim **8**, wherein the microcomputer further includes a third program module to operate a normal routine of the display system when the pass word system is disabled.

10. The system of claim **3**, wherein the microcomputer includes a first program module to receive the keyed ID code and store the keyed ID code in the memory as the stored ID code.

11. The system of claim **10**, wherein the microcomputer further includes:

a second program module to read data as an ID code from the memory at a location reserved for the stored ID code when a pass word system is enabled;

a third program module to determine consistency between the keyed ID code and the data read as an ID code from the memory;

a fourth program module to operate an error routine of the display system when the keyed ID code and the data read as an ID code from the memory are inconsistent;

a fifth program module to receive horizontal and vertical synchronizing signals from the computer system; and

a sixth program module to control the on-screen circuit to generate the analog on screen image signals, the analog on screen image signals being synchronized with the horizontal and vertical synchronizing signals and causing a message to be carried in the CRT drive signals, the message indicating that the keyed ID code is inconsistent with the stored ID code when the error routine is operated.

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12. The system of claim **3**, wherein the microcomputer includes:

a first program module to receive horizontal and vertical synchronizing signals from the computer system;

a second program module to receive digital message signals from the computer system; and

a third program module to control the on-screen circuit to generate the analog on screen image signals, the analog on-screen image signals being synchronized with the horizontal and vertical synchronizing signals and causing a message to be displayed on the display device, the message being composed in accordance with the digital message signals.

13. In a display system that includes a microcomputer and a memory and a key pad and an on screen circuit and a video amplifier, the display system being associated with a computer system, a method comprising steps of:

amplifying analog computer image signals from the computer system in the video amplifier to provide amplified image signals;

converting digital information signals from the microcomputer into analog on-screen image signals in the on screen circuit, the microcomputer being coupled to horizontal and vertical synchronizing signals from the computer system to synchronize the analog on-screen image signals with the analog computer image signals;

storing a stored ID code in the memory;

forming a keyed ID code in the microcomputer from key pad inputs;

determining in the microcomputer when the stored ID code is unequal to the keyed ID code;

setting one of (1) the gain of the video amplifier to be substantially zero and (2) a connection state of analog switches coupled between the computer system and the video amplifier to be in a disconnected state when the microcomputer determines that the stored ID code is unequal to the keyed ID code; and

mixing the amplified image signals and the analog on-screen image signals to provide CRT drive signals.

14. The method of claim **13**, further including steps of receiving and storing a flag in the memory to indicate that a pass word system is one of enabled and disabled.

15. The method of claim **14**, wherein the step of storing a stored ID code includes storing the keyed ID code in the memory as the stored ID code when the flag indicates that the pass word system is enabled.

16. The method of claim **15**, further including steps of:

reading the flag from the memory each time the display system is turned on to determine whether the pass word system is enabled;

reading data as an ID code from the memory at a location reserved for the stored ID code when the pass word system is enabled;

determining in the microcomputer consistency between the keyed ID code and the data read as an ID code from the memory;

operating a normal routine of the display system when the keyed ID code and the data read as an ID code from the memory are consistent; and

operating an error routine of the display system when the keyed ID code and the data read as an ID code from the memory are inconsistent.

17. The method of claim 14, wherein the steps of storing a stored ID code includes storing the keyed ID code in the memory as the stored ID code when both (1) the flag indicates that the pass word system is enabled and (2) data stored in the memory at a location reserved for the stored ID code has a predetermined value indicating that no ID code has been stored in the memory.

18. The method of claim 14, further including a step of reading the flag from the memory each time the display system is turned on to determine whether the pass word system is enabled.

19. The method of claim 18, further including a step of operating a normal routine of the display system when the pass word system is disabled.

20. The method of claim 13, wherein the step of storing a stored ID code includes storing the keyed ID code in the memory as the stored ID code.

21. The method of claim 20, further including steps of:

reading data as an ID code from the memory at a location reserved for the stored ID code when a pass word system is enabled;

determining in the microcomputer consistency between the keyed ID code and the data read as an ID code from the memory;

operating an error routine of the display system when the keyed ID code and the data read as an ID code from the memory are inconsistent;

receiving horizontal and vertical synchronizing signals from the computer system; and

generate the analog on screen image signals in the on screen circuit, the analog on screen image signals being synchronized with the horizontal and vertical synchronizing signals and causing a message to be carried in the CRT drive signals, the message indicating that the keyed ID code is inconsistent with the stored ID code when the error routine is operated.

22. The method of claim 13, further including steps of:

receiving at the microcomputer horizontal and vertical synchronizing signals from the computer system;

receiving at the microcomputer digital message signals from the computer system; and

generating the analog on screen image signals in the on screen circuit, the analog on-screen image signals being synchronized with the horizontal and vertical synchronizing signals and causing a message to be displayed on the display device, the message being composed in accordance with the digital message signals.

*   *   *   *   *

23. An apparatus, comprising:

a display device attached to a computer, displaying an image;

a circuit for converting electronic signals from said computer to said image;

memory means for storing ID code data input via a user; and

a microcomputer for controlling said display device responsive to a result of a

comparison between an ID code input by said user with said ID code data stored in said memory,

and for receiving signals from said computer to control an operation of said display device.

24. The apparatus of claim 23, said apparatus further comprising a plurality of switches

interposed on a respective electrical conduction path between respective output terminals of said

computer and respective input terminals of said circuit, said switches being turned off by a

control signal output from a terminal of said microcomputer when the result of said comparison

indicates that said ID code input by said user is inconsistent with said stored ID code data.

1   25. In cooperation with a computer that provides computer image signals, an apparatus

2   comprising:

3   a driver to drive a display device to display an image from said computer;

4   one of a first microcomputer circuit and a second microcomputer circuit, the first

5   microcomputer circuit including a microcomputer coupled to a driver to control the gain of the

6   driver, the second microcomputer circuit including the microcomputer coupled to switches that

7   are coupled between the computer and the driver so that the microcomputer controls the

8   connection state of the switches;

9   a circuit to convert digital information signals from the microcomputer into image

10 signals, the microcomputer being coupled to horizontal and vertical signals from the computer;

11   a memory coupled to the microcomputer to store a stored ID code; and

12   a key pad coupled to the microcomputer to form a keyed ID code, the microcomputer

13 determining when the stored ID code is unequal to the keyed ID code, the microcomputer setting

14 one of (1) the gain of the driver to be substantially zero and (2) a connection state of the switches

15 to be in a disconnected state when the microcomputer determines that the stored ID code is

16 unequal to the keyed ID code.

    26.   The apparatus of claim 25, wherein the microcomputer includes a first program

    module to receive and store a flag in the memory to indicate that a pass word is one of enabled

    and disabled.

1   27.   The apparatus of claim 26, wherein the microcomputer further includes a second

2   program module to receive the keyed ID code and store the keyed ID code in the memory as the

3   stored ID code when the flag indicates that the pass word is enabled.

1   28.   The apparatus of claim 27, wherein the microcomputer further includes:

2   a third program module to read the flag from the memory each time the display device is

3   turned on to determine whether the pass word is enabled;

4   a fourth program module to read data as an ID code from the memory at a location

5   reserved for the stored ID code when the pass word is enabled;

6   a fifth program module to determine consistency between the keyed ID code and the data

7   read as an ID code from the memory;

8   a sixth program module to operate a normal routine of the display device when the keyed

9   ID code and the data read as an ID code from the memory are consistent; and

10   a seventh program module to operate an error routine of the display device when the

11   keyed ID code and the data read as an ID code from the memory are inconsistent.

1   29.   The apparatus of claim 26, wherein the microcomputer further includes a second

2   program module to receive the keyed ID code and store the keyed ID code in the memory as the

3   stored ID code when both (1) the flag indicates that the pass word is enabled and (2) data stored

4   in the memory at a location reserved for the stored ID code has a predetermined value indicating

5   that no ID code has been stored in the memory.

1   30.   The apparatus of claim 26, wherein the microcomputer further includes a second

2   program module to read the flag from the memory each time the display device is turned on to

3   determine whether the pass word is enabled.

1   31.   The apparatus of claim 30, wherein the microcomputer further includes a third

2   program module to operate a normal routine of the display device when the pass word system is

3   disabled.

1   32.   The apparatus of claim 25, wherein the microcomputer includes a first program

2   module to receive the keyed ID code and store the keyed ID code in the memory as the stored ID

3   code.

1   33.   The apparatus of claim 32, wherein the microcomputer further includes:

    a second program module to read data as an ID code from the memory at a location

2   reserved for the stored ID code when a pass word is enabled;

3   a third program module to determine consistency between the keyed ID code and the data

4   read as an ID code from the memory;

5   a fourth program module to operate an error routine of the display device when the keyed

6   ID code and the data read as an ID code from the memory are inconsistent;

7   a fifth program module to receive horizontal and vertical signals from the computer; and

8   a sixth program module to control the circuit to generate the analog image signals,

9

10   causing a message to be carried in drive signals, the message indicating that the keyed ID code is

11   inconsistent with the stored ID code when the error routine is operated.

1   34.   The apparatus of claim 25, wherein the microcomputer includes:

2   a first program module to receive horizontal and vertical signals from the computer;

3   a second program module to receive digital message signals from the computer; and

4   a third program module to control the circuit to generate the analog image signals,

5 causing a message to be displayed on the display device, the message being composed in

6 accordance with the digital information signals.

1   35. In an apparatus that includes a microcomputer and a memory and a key pad and a

2 circuit, a method comprising the steps of:

3   driving computer image signals from a computer in the display driver to provide image

4 signals to drive a display;

5   converting digital information signals from the microcomputer into image signals in the

6 circuit;

7   storing a stored ID code in the memory;

8   forming a keyed ID code in the microcomputer from key pad inputs;

9   determining in the microcomputer when the stored ID code is unequal to the keyed ID

10 code; and

11   setting the computer and the display driver to be in a disconnected state when the

12 microcomputer determines that the stored ID code is unequal to the keyed ID code.

1   36. The method of claim 35, further including steps of receiving and storing a flag in the

2 memory to indicate that a pass word is one of enabled and disabled.

1   37. The method of claim 36, wherein the step of storing a stored ID code includes storing

2   the keyed ID code in the memory as the stored ID code when the flag indicates that the pass word

3   is enabled.

1   38. The method of claim 37, further including steps of:

2   reading the flag from the memory each time the display is turned on to determine whether

3   the pass word is enabled;

4   reading data as an ID code from the memory at a location reserved for the stored ID code

5   when the pass word is enabled;

6   determining in the microcomputer consistency between the keyed ID code and the data

7   read as an ID code from the memory;

8   operating a normal routine of the display when the keyed ID code and the data read as an

9   ID code from the memory are consistent; and

10   operating an error routine of the display when the keyed ID code and the data read as an

11   ID code from the memory are inconsistent.

1   39. The method of claim 35, wherein the steps of storing a stored ID code includes

2   storing the keyed ID code in the memory as the stored ID code when both (1) the flag indicates

3   that the pass word is enabled and (2) data stored in the memory at a location reserved for the

4   stored ID code has a predetermined value indicating that no ID code has been stored in the

5   memory.

1   40.   The method of claim 35, further including a step of reading the flag from the memory

2   each time the display is turned on to determine whether the pass word is enabled.

1   41.   The method of claim 40, further including a step of operating a normal routine of the

2   display when the pass word is disabled.

1   42.   The method of claim 35, wherein the step of storing a stored ID code includes storing

2   the keyed ID code in the memory as the stored ID code.

1   43.   The method of claim 42, further including steps of:

2   reading data as an ID code from the memory at a location reserved for the stored ID code

3   when a pass word is enabled;

4   determining in the microcomputer consistency between the keyed ID code and the data

5   read as an ID code from the memory;

6   operating an error routine of the display when the keyed ID code and the data read as an

7   ID code from the memory are inconsistent; and

8   generating an image signal in the circuit, causing a message to be carried in said image to

9   drive said display, the message indicating that the keyed ID code is inconsistent with the stored

10   ID code when the error routine is operated.

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1   44. The method of claim 35, further including steps of:

2   receiving at the microcomputer horizontal and vertical signals from the computer;

3   receiving at the microcomputer digital message signals from the computer; and

4   generating an image signal in the circuit, causing a message to be displayed on the

5   display, the message being composed in accordance with the digital information signals.

1   45. An apparatus, comprising:

2   a memory having a password identification code stored within;

3   a keyboard for inputting said password identification code;

4   a display unit connected to a computer, said computer being enabled only when said

5   password identification code is entered on said keyboard;

6   a converter for converting electronic image signals from said computer to an image to be

7   displayed on said display unit;

8   a driver for driving said display to display said image on said display unit; and

9   a circuit for disabling said driver if information typed on said keyboard does not match

10   said password identification code stored in said memory, wherein said circuit enables said driver

11   if said information typed on said keyboard matches said password identification code in memory.

1   46. The apparatus system of claim 45, wherein said display unit is a liquid crystal display

2   unit.

47. The apparatus of claim 46, wherein said driver comprises three control lines of yellow, red and blue signals to achieve a color display.

48. A method for securing a display unit on a computer, comprising the steps of:

providing a memory having a password identification code stored within;

converting digital image signals from said computer into image signals;

driving said image signals to produce an image on said display unit;

inputting a code on a keyboard attached to said computer system;

comparing said inputted code to said password identification code stored in memory;

disabling said display unit if said inputted code does not match said password identification code stored in memory; and

enabling said display unit to continue to produce said image based on signals sent from said computer if said inputted code matches said password identification code stored in said memory.

49. The method of claim 48, wherein said step of disabling said display unit comprises disabling drivers for said display unit.

50. The method of claim 48, wherein said step of enabling said display unit comprises enabling drivers for said display unit.